

REMARKS

This Amendment, filed in reply to the Non-Final Office Action dated March 23, 2007, is believed to be fully responsive to the objections and rejections raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

In the present amendment, claim 1 has been amended to improve its form. Claim 1 has also been amended to further characterize the alignment of the optical interference fibers.

Claims 2 and 12 have been previously canceled.

Claims 11 and 13-28 have been previously withdrawn.

Support for the amendments can be found in the specification, e.g., at page 3, line 16; page 4, lines 1-5; page 10, lines 1-19; page 18, lines 11-35; and in Fig. 1 and Fig. 2.

No new matter has been added. Entry of the Amendment is respectfully submitted to be proper. Upon entry of the Amendment, claims 1, 3-11 and 13-28 will be pending in the application.

I. Objections

Specification

The specification is objected to because the specification allegedly refers to Patent Documents (1-11) without identifying the documents. Additionally, it was asserted that the specification allegedly improperly refers to claims.

Applicants respectfully request that the Examiner withdraw the forgoing objections to the specification in light of the amendments to the specification. The specification has been amended to recite the Patent documents 1-11 and by deleting the references to claims in the specification. Thus, the objections have been obviated.

Claim Objections

Claim 1 was objected to in paragraph 3 of the Non-Final Office Action of March 23, 2007; particularly, the phrase “filbers comprises” was objected to for grammatical reasons.

Applicants respectfully request withdrawal of the objection in light of the amendment to claim 1.

II. Response to Claim Rejection Under 35 U.S.C. § 112

Claims 1 and 3-10 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, it was asserted that there is insufficient antecedent basis for “the optical interference fiber.”

Applicants have amended claim 1 to obviate the claim objection. Withdrawal of the objection to claim 1 is respectfully requested.

III. Response to Claim Rejections Under 35 U.S.C. § 102/103 and 35 U.S.C. § 103(a)

The Examiner reiterated the previous rejections under 35 U.S.C. § 102/103 and 35 U.S.C. § 103(a) made in the Final Office Action dated September 11, 2006. The Examiner stated that claims 1, 3-5 and 8-9 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly being obvious over WO 98/46815 (U.S. equivalent: U.S. 6,430,348) to Asano et al. (hereinafter “Asano et al.”). Claims 6, 7 and 10 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Asano et al. as applied to claims 1, 3-5 and 8-9, and further in view of U.S. 2002/0016117 to Hamajima et al., U.S. 4,419,479 to Springer with respect to claims 6 and 7 respectively. Thus,

for the sake of brevity and to avoid redundancy, Applicants' response to the above-mentioned rejections is provided below in Section IV.

IV. Response to Examiner's Comments on Applicants' Arguments of 1/11/2007

The rejection of claims 1 and 3-10 under 35 U.S.C. § 102/103 and under 35 U.S.C. § 103 was maintained.

According to the Examiner, the phrase "a lengthwise direction" as recited in claim 1 appears to describe the orientation of the polarizing plate in reference to an optical interference fiber. Applicants respectfully disagree with the Examiner's characterization of claim 1.

Claim 1, as currently amended, is distinguishable from Asano et al. What is claimed in amended claim 1 is:

1. An identifying marker attached as an identification target to a product or service provided by a client for identification of said product or service,

the identifying marker being characterized in that at least a portion of said identification target is formed by a planar arranged optical interference fibers being aligned parallel to a lengthwise direction, where each of the optical interference fibers comprising an alternate laminated body obtained by laminating layers of polymers with different refractive indexes in an alternating fashion,

wherein the identifying marker is identified by P polarized light and S polarized light from the portion of said planar arranged optical interference fibers, where the P polarized light and S polarized light are observed by using a polarized plate for measurement of a wavelength and intensity curve of polarizing light passing through a slit of the polarizing plate oriented in the

lengthwise direction of the optical interference fibers and a direction perpendicular thereto.

Most importantly, claim 1 recites in relative part: “[A]t least a portion of said identification target is formed by a planar arranged optical interference fibers being aligned parallel to a lengthwise direction.” Applicants respectfully submit that the above recited feature is required in order to observe P polarized light or S polarized light. Asano et al. does not teach this recited feature. Claim 1 does not recite that all portions of “an identifying marker” are made by “non-woven fabric” itself, even though “the identifying marker” is made by non-woven fabric. Furthermore, claim 1 does not explicitly recite “non-woven fabric.” The fiber, as recited in claim 1, does not function as an identifying target, but only serves as an identifying target. Thus, Applicants respectfully request reconsideration and withdrawal of the rejection in light of the amended claim recitation.

Next, the Examiner asserted:

“Firstly, the current specification teaches that P and S polarized light are observed when the slit axis of a polarizing plate is arranged parallel and perpendicular (respectively) to the lengthwise direction of a single optical interference fiber aligned in a planar fashion.” (See, Office Action at p. 8, ¶ 12, ll. 10-14).

To the contrary, there is no teaching in the present specification that P and S polarized light are observed when the slit axis of a polarizing plate is arranged parallel and perpendicular (respectively) to the lengthwise direction of a single optical interference fiber aligned in a planar fashion (see specification, last paragraph bridging pages 13 and 14). The specification clearly describes “polarization property by visual observation.” (see specification at p. 32, ll. 5-19).

It appears that the Examiner has not considered the present specification regarding the observance of P and S polarized light. Fifty filaments were arranged in parallel on a black board without spacing between them, the slits axis of the polarizing plate was situated parallel to the lengthwise direction of the parallel planar arranged filaments, and the brightness of the slit section was observed, after which the polarizing plate was rotated 90° in the same plane, the slit section was visually observed and the difference in brightness before and after rotating the polarizing plate was judged as satisfactory or unsatisfactory. If a visually discernible difference in brightness of slit section before and after rotation of polarizing plate was observed, then there is satisfactory optical interference property. Unsatisfactory optical interference property means that there is no polarizing plate. The present invention must follow the above-mentioned “polarization property by visual observation,” whenever P and S polarized lights are observed, by the human naked eye. Thus, it appears that the Examiner has not fully appreciated the description of the present specification.

As explained above in detail, the present invention uses many optical interference fibers, not a single optical fiber, aligned in a planar fashion in order to observe P and S polarized light by using a polarizing plate. Asano et al. does not disclose that “at least a portion of the identification target is formed by a planar arranged optical interference fibers being aligned in a lengthwise direction in order to observe P polarized light or S polarized light” as recited in claim 1.

In fact, Asano et al. teaches away from the present invention. Claim 1 is distinguishable over Asano et al., because Asano et al. does not teach or suggest optical interference fibers being arranged in the lengthwise direction. Asano et al. discloses that

“in the production of a non-woven fabric from the optically interfering filaments having the above flat cross section, when the

filaments are stacked in a parallel with one another, not only the probability of incident light reaching the bottom portion of a stacked product decreases, but also the color development intensity decreased due to the reflection of stray light from each filament, and hence, the non-woven fabric cannot be provided for practical use. The essential point of the present invention is that the optically interfering filaments are randomly and collectively stacked in a state where they are axially twisted at intervals along the major axis thereof." (Asano et al. at col. 33, lines 7-18, See also, col. 34, ll. 25-36).

Hence, Asano et al. does not teach or suggest P and S polarized light, because Asano et al. focuses on randomizing alignment of the optical interference filaments so that they lose P and S polarized light. Claim 1 as amended distinguishes over Asano et al. because the Asano et al. reference teaches away from the present invention. Therefore, a person of ordinary skilled in the art would not recognize P and S polarized light based on the teachings of Asano et al.

Applicants respectfully submit that in order to observe P polarized light or S polarized light, the following four conditions must be met:

Condition 1: A fiber comprises an alternate laminated body obtained by laminating layers of polymers with different refractive indexes in an alternating fashion.

Condition 2: The fibers have to be aggregated so as to be arranged parallel to the lengthwise direction of the oriented fiber aligned in a planar fashion, because random alignment of fibers would lose its optical anisotropic character. (See, Specification at line 36, p. 13 to line 27, p. 14; See also, line 16, p. 31 to line 1, p. 33).

Condition 3: Discovery of P polarized light and S polarized light that the aggregated optical interference fibers have. (See, Specification at p. 14, ll. 11-27).

Condition 4: Observation of P polarized light and S polarized light by using the polarizing plate. (See, Specification at line 5, page 32 to line 1, page 33).

Asano et al. does not disclose condition 2-4. Even if Asano et al. discloses condition 1, it is quite apparent that mere existence of single optical interference fiber (which only satisfies condition 1, but does not satisfy conditions 2-4) does not cause P and S polarized light, and the mere existence of the fiber aggregate such as non-woven fabric or embroidery yarn also does not cause P polarized light and S polarized light.

Regarding the Examiner's assertion that Asano et al. discloses inherent properties of an optical interference fiber, even if that might be true, Asano et al. does not disclose the use the P and S polarized light as an identifying marker. Also, Asano et al. does not teach conditions 2 - 4 as previously mentioned. Therefore, Asano et al. does not teach or suggest an identifying marker comprising P and S polarized light because conditions 1- 4 for an identifying marker are not met.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the local Washington D.C. telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111
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Respectfully submitted,

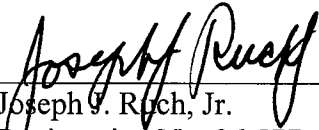
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